EXAMPLE STATEMENT OF WORK (SOW)

For the Army faculty programs please use the FREP or HSSMFP SOW template. For all other programs use the guidelines below.

STAS

1. TITLE. Neural-Network-Based Target Identification

2. GENERAL. The services of a scientist or engineer, with technical support, are required to evaluate specific problems relating to the development of a neural-network-based target identification system that can estimate the aspect angle of the target and work in a cluttered environment.

Identification in a cluttered environment of fixed-and-rotary-wing aircraft or ground vehicles such as tanks and trucks is difficult with conventional pattern recognition techniques that require the algorithm designer to specify completely the image processing scheme. Neural-networks provide a different approach to the problem in that they can train themselves to perform the identification task once given a training set of examples spanning the occurrences of interest.

3. OBJECTIVE. The objective of this effort is to develop a precise form of a neural-network and to determine, in a hybrid scheme with some conventional pattern recognition algorithms, the usefulness of the neural-network. The tools for efficient computer utilization to accomplish this task must also be developed and specified.

4. SPECIFIC TASKS. The following tasks shall be performed independent of Government supervision, direction, or control:
a. Develop strategies for using self-organizing, neural-network algorithms for 3-dimensional tactical target and wire frame model recognition.
b. Develop segmentation and feature extraction procedures that combine conventional and neural-network methods for target recognition in very cluttered environments.
c. Develop image processing and design tools for concept implementation.

5. REPORTING REQUIREMENTS.
a. Oral reports as required by the COR.
b. A final report summarizing the work performed and the results and conclusions derived shall be submitted to the COR and to the prime contractor within thirty days after the end of the contract period of performance.

6. QUALIFICATION REQUIREMENTS. The consultant/analyst selected for the performance of this statement of work must have specific experience in neural-network algorithms as evidenced by publications in peer-reviewed journals. The consultant/analyst must have achieved technical training equivalent to the Ph.D. level with a strong background in computer programming, digital image processing and target identification.

7. PLACE AND PERIOD OF PERFORMANCE, WORK DAYS AND TRAVEL.

a. Place of Performance: Except for the travel listed in paragraph 7.d. below, all work will be at the performer's location.

b. Period of Performance: The period of performance shall be from the effective date of the delivery order through the following 12 months.

c. Work Days: An estimate of 45 working days for a Principal Investigator, 40 days for a post doctoral research assistant and 40 working days each for two graduate students.

d. Travel: Trips are contemplated as follows: Four 3-day trips to the Army Research Development and Engineering Center (ARDEC) by the Principal Investigator.

8. RESTRICTIONS. There are no known existing or potential conflicts of interest associated with this task.

9. SECURITY CLEARANCE. None required; the effort is unclassified.

10. HUMAN SUBJECTS. No human subjects are required.

11. CONTRACTING OFFICER'S REPRESENTATIVE (COR).
    Name:
    Command:
    Agency:
    Address (Include Office Symbol):
    Phone: (DSN); (Commercial); (FAX)
    E-Mail:

12. ADMINISTRATIVE POINT OF CONTACT.
    Name:
    Command:
    Agency:
    Address (Include Office Symbol):
    Phone: (DSN); (Commercial); (FAX)
    E-Mail:

13. RECOMMENDED SOURCE.
    Name:
    Institution/Company Name:
    Address:
    Phone and FAX:
    E-Mail:

14. RELEVANCE. This work will support ARDEC's mission in target identification.

15. CAPABILITY STATEMENT. ARDEC does not have the necessary in-house capability to perform the work specified in the statement of work.

ATTACHMENT 1
INDEPENDENT GOVERNMENT COST ESTIMATE

1. Budget.

A. Labor

Category	Days	Rate/Day	Estimated Cost
Principal Investigator (PI)	45	$625	$28,125
Post Doc	40	200	8,000
Graduate Student	40	80	3,200
Graduate Student	40	80	3,200
University Overhead for Post Doc and GS labor @ 55%			7,920

B. Materials

COHORT & VISIX Software License Fees	9,100
Postage, copies, supplies, misc.	275

Travel:

Four 3-day trips to ARDEC Principal Investigator (PI)	2,800
Three 7-day trips to ARDEC (Post Doc & G.S.)	3,600

Subtotal:	$66,220

C.	ARO 0% Overhead:	$0

TOTAL:	$80,692

2. Funding. The funding document is attached: MIPR 04-1234

ATTACHMENT 2
DETERMINATIONS AND SIGNATURES
When submitting the SOW, please ensure Attachment 1 and 2 are separate pages.

1. Title:

2. Economy Act Determination (Contract Off-Loading). In accordance with DoD Policy requirements of the FAR 17.5 entitled, "Interagency Acquisitions under the Economy Act" and applicable local regulations, each statement of work from a DoD agency shall contain either a (i) determination and findings in accordance with FAR 17.503 or (ii) a statement as follows:

We agree that the established SSP – operating policies and procedures contained therein serve as a Memorandum of Understanding relative to contract off-loading between the ARO and the sponsor of this SSP effort as required by FAR 17.5. No other action is required on behalf of the sponsor.

3. Type of Services Required:

Nonpersonal Services This request represents nonpersonal services and is not in violation of the personal services policy set forth in the Federal Acquisition Regulation (FAR) 37.104.

4. Conflicts of Interest. There are no known existing or potential conflicts of interest associated with this task.

COR Signature_____
Typed (or printed) Name:_____
Date _____

5. Legal Review.* This request has been reviewed and is considered legally sufficient as written.

Signature_____
Typed (or printed)
Attorney-Advisor Name:_____
Date _____

* This review is not intended to be a review of the actual task order under the Scientific Services Program prime contract. Instead, the SSP legal review should be completed by the attorney, who does not have a direct interest in the work being proposed, to determine the following:

Is this request for non-personal services? (Personal services are not allowed).
Does the SOW as written fall within the scope of the activity's mission (i.e., is this something they should be doing at all)?
Do the terms of the specific tasks and the various elements of work make sense (i.e., are they consistent, are they complete)?